

WHAT IS CLAIMED IS:

1        1. A method for filtering communications received from over a network for a  
2 person-to-person communication program, comprising:

3            receiving a communication for the person-to person communication program;

4            processing the communication to determine predefined language statements;

5            inputting information on the determined language statements into a neural

6 network to produce an output value;

7            determining whether the output value indicates that the communication is

8 unacceptable;

9            forwarding the communication to the person-to-person communication program

10 unchanged if the output value indicates that the communication is acceptable; and

11            performing an action with respect to the communication upon determining that

12 the communication is unacceptable that differs from the forwarding of the

13 communication that occurs if the output value indicates that the communication is

14 acceptable.

1        2. The method of claim 1, wherein the person-to-person communication  
2 program is intended for use in a work environment, and wherein determining predefined  
3 language statements comprises determining non-work related terms that are often  
4 searched for by employees.

1        3. The method of claim 1, wherein the neural network includes an input node  
2 for each predefined language statement and wherein inputting the information on the  
3 determined non-work related statements comprises inputting a value related to number of  
4 occurrences of each non-work related statement on the input node corresponding to the  
5 non-work related statement.

1           4.       The method of claim 3, wherein the non-work related statements are  
2       members of the set of statement types comprising at least one of: sport scores, stock  
3       quotes, news, hate words, and sexually explicit words.

1           5.       The method of claim 1, wherein the person-to-person communication  
2       program is intended for use by a user at a predetermined age level, and wherein  
3       determining predefined language statements comprises determining inappropriate terms  
4       for the predetermined age level.

1           6.       The method of claim 5, wherein the neural network includes an input node  
2       for each inappropriate term for the predetermined age level and wherein inputting the  
3       information on the determined inappropriate terms for the predetermined age level  
4       comprises inputting a value related to a number of occurrences of each predetermined  
5       term on the input node corresponding to the predetermined term.

1           7.       The method of claim 5, wherein the inappropriate terms for the  
2       predetermined age level are members of the set of statement types comprising:  
3       inappropriate sexual references for the predetermined age level, inappropriate swear  
4       words for the predetermined age level, and inappropriate hate words for the  
5       predetermined age level.

1           8.       The method of claim 1, wherein the person-to-person communication  
2       program comprises an email program or instant messaging program.

1           9.       The method of claim 1, wherein the communication is received in packets  
2       that together comprise the entire communication, and wherein each packet is processed to  
3       determine predefined language statements.

1        10.    The method of claim 1, wherein processing the communication comprises  
2 determining a weighted number of occurrences of predefined language statements,  
3 wherein the neural network includes an input node for each predefined language  
4 statement and wherein inputting the information on the determined language statements  
5 comprises inputting the weighted number of occurrences of each predefined language  
6 statement on the input node corresponding to the predefined language statement.

1        11.    The method of claim 10, wherein the predefined language statements  
2 include unacceptable language statements and content language statements, further  
3 comprising:

4            determining proximity of predefined content and unacceptable language  
5 statements; and

6            inputting information on the proximity of the predefined language statements at  
7 input nodes, wherein the output value is based on the number of occurrences of  
8 unacceptable and content language statements and the proximity of content and  
9 unacceptable language statements.

1        12.    The method of claim 1, wherein performing the action with respect to the  
2 communication upon determining that the communication is unacceptable comprises  
3 inhibiting the person-to-person communication program access to the communication.

1        13.    The method of claim 12, wherein inhibiting the person-to-person  
2 communication program access to the communication upon determining that the  
3 communication is unacceptable comprises blocking access to the entire communication.

1        14.    The method of claim 12, further comprising determining language  
2 statements in the communication that are unacceptable, wherein inhibiting the person-to-  
3 person communication program access to the communication upon determining that the  
4 communication is unacceptable comprises blocking access to the unacceptable language

5 statements and allowing access to language statements not determined to be unacceptable  
6 in the communication.

1 15. The method of claim 1, wherein the predefined language statements are  
2 capable of being modified by an administrator.

1 16. A system for filtering communications received from over a network for a  
2 person-to-person communication program, comprising:

3 means for receiving a communication for the person-to person communication  
4 program;

5 means for processing the communication to determine predefined language  
6 statements;

7 means for inputting information on the determined language statements into a  
8 neural network to produce an output value;

9 means for determining whether the output value indicates that the communication  
10 is unacceptable;

11 means for forwarding the communication to the person-to-person communication  
12 program unchanged if the output value indicates that the communication is acceptable;  
13 and

14 means for performing an action with respect to the communication upon  
15 determining that the communication is unacceptable that differs from the forwarding of  
16 the communication that occurs if the output value indicates that the communication is  
17 acceptable.

1 17. The system of claim 16, wherein the person-to-person communication  
2 program is intended for use in a work environment, and wherein the means for  
3 determining predefined language statements determines non-work related terms that are  
4 often searched for by employees.

1           18.     The system of claim 16, wherein the person-to-person communication  
2 program is intended for use by a user at a predetermined age level, and wherein the  
3 means for determining predefined language statements determines inappropriate terms  
4 for the predetermined age level.

1           19.     The system of claim 16, wherein the person-to-person communication  
2 program comprises an email program or instant messaging program.

1           20.     The system of claim 16, wherein the means for processing the  
2 communication to determine predefined language statements determines a weighted  
3 number of occurrences of predefined language statements, wherein the neural network  
4 includes an input node for each predefined language statement and wherein the means for  
5 inputting the information on the determined language statements inputs the weighted  
6 number of occurrences of each predefined language statement on the input node  
7 corresponding to the predefined language statement.

1           21.     The system of claim 20, wherein the predefined language statements  
2 include unacceptable language statements and content language statements, further  
3 comprising:

4           means for determining proximity of predefined content and unacceptable  
5 language statements; and  
6           means for inputting information on the proximity of the predefined language  
7 statements at input nodes, wherein the output value is based on the number of  
8 occurrences of unacceptable and content language statements and the proximity of  
9 content and unacceptable language statements.

1           22.     The system of claim 16, wherein the means for performing the action with  
2 respect to the communication upon determining that the communication is unacceptable  
3 inhibits the person-to-person communication program access to the communication.

1           23.     An article of manufacture for filtering communications received from over  
2 a network for a person-to-person communication program, wherein the article of  
3 manufacture causes operations to be performed, the operations comprising:  
4           receiving a communication for the person-to person communication program;  
5           processing the communication to determine predefined language statements;  
6           inputting information on the determined language statements into a neural  
7 network to produce an output value;  
8           determining whether the output value indicates that the communication is  
9 unacceptable;  
10          forwarding the communication to the person-to-person communication program  
11 unchanged if the output value indicates that the communication is acceptable; and  
12          performing an action with respect to the communication upon determining that  
13 the communication is unacceptable that differs from the forwarding of the  
14 communication that occurs if the output value indicates that the communication is  
15 acceptable.

1           24.     The article of manufacture of claim 23, wherein the person-to-person  
2 communication program is intended for use in a work environment, and wherein  
3 determining predefined language statements comprises determining non-work related  
4 terms that are often searched for by employees.

1           25.     The article of manufacture of claim 24, wherein the neural network  
2 includes an input node for each predefined language statement and wherein inputting the  
3 information on the determined non-work related statements comprises inputting a value  
4 related to number of occurrences of each non-work related statement on the input node  
5 corresponding to the non-work related statement.

1           26.    The article of manufacture of claim 25, wherein the non-work related  
2    statements are members of the set of statement types comprising at least one of: sport  
3    scores, stock quotes, news, hate words, and sexually explicit words.

1           27.    The article of manufacture of claim 23, wherein the person-to-person  
2    communication program is intended for use by a user at a predetermined age level, and  
3    wherein determining predefined language statements comprises determining  
4    inappropriate terms for the predetermined age level.

1           28.    The article of manufacture of claim 27, wherein the neural network  
2    includes an input node for each inappropriate term for the predetermined age level and  
3    wherein inputting the information on the determined inappropriate terms for the  
4    predetermined age level comprises inputting a value related to a number of occurrences  
5    of each predetermined term on the input node corresponding to the predetermined term.

1           29.    The article of manufacture of claim 27, wherein the inappropriate terms  
2    for the predetermined age level are members of the set of statement types comprising:  
3    inappropriate sexual references for the predetermined age level, inappropriate swear  
4    words for the predetermined age level, and inappropriate hate words for the  
5    predetermined age level.

1           30.    The article of manufacture of claim 23, wherein the person-to-person  
2    communication program comprises an email program or instant messaging program.

1           31.    The article of manufacture of claim 23, wherein the communication is  
2    received in packets that together comprise the entire communication, and wherein each  
3    packet is processed to determine predefined language statements.

1           32.     The article of manufacture of claim 23, wherein processing the  
2 communication comprises determining a weighted number of occurrences of predefined  
3 language statements, wherein the neural network includes an input node for each  
4 predefined language statement and wherein inputting the information on the determined  
5 language statements comprises inputting the weighted number of occurrences of each  
6 predefined language statement on the input node corresponding to the predefined  
7 language statement.

1           33.     The article of manufacture of claim 32, wherein the predefined language  
2 statements include unacceptable language statements and content language statements,  
3 further comprising:

4           determining proximity of predefined content and unacceptable language  
5 statements; and

6           inputting information on the proximity of the predefined language statements at  
7 input nodes, wherein the output value is based on the number of occurrences of  
8 unacceptable and content language statements and the proximity of content and  
9 unacceptable language statements.

1           34.     The article of manufacture of claim 23, wherein performing the action  
2 with respect to the communication upon determining that the communication is  
3 unacceptable comprises inhibiting the person-to-person communication program access  
4 to the communication.

1           35.     The article of manufacture of claim 34, wherein inhibiting the person-to-  
2 person communication program access to the communication upon determining that the  
3 communication is unacceptable comprises blocking access to the entire communication.

1           36.     The article of manufacture of claim 34, further comprising determining  
2 language statements in the communication that are unacceptable, wherein inhibiting the

3 person-to-person communication program access to the communication upon  
4 determining that the communication is unacceptable comprises blocking access to the  
5 unacceptable language statements and allowing access to language statements not  
6 determined to be unacceptable in the communication.

1           37. The article of manufacture of claim 23, wherein the predefined language  
2 statements are capable of being modified by an administrator.